

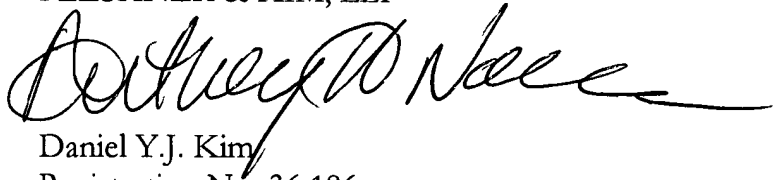
Serial No. 09/773,574

Docket No. K-259

REMARKS

Claims 1-44 are pending in this application. Prompt examination and allowance in due course are respectfully solicited.

Respectfully submitted,
FLESHNER & KIM, LLP

A handwritten signature in black ink, appearing to read "Daniel Y.J. Kim", written over the printed name.

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A. Specification Paragraphs With Mark-ups to Show Changes Made

The following are mark-ups to show changes made to paragraph(s) starting at page 17, line 6 and ending at page 17, line 10:

As described above, if AP signatures are mapped with the scrambling codes, each of the 16 scrambling codes are different from one another. The respective scrambling codes $SC\#i$ have a channelization OVSF code tree. Accordingly, the channelization code of a data part (C_d) and a control part (C_c) in a message part is selected in the channelization OVSF code tree of the respective scrambling code.

The following are mark-ups to show changes made to paragraph(s) starting at page 17, line 13 and ending at page 18, line 5:

Referring to Figure 7a, in an OVSF code tree of each scrambling code, a channelization code C_d of the data part is selected from the codes having spreading factors $4 \sim 256$ in a direction of an up branch $C_{SF,0}$ or $C_{SF,SF/2}$ from a node $C_{2,0}$ or $C_{2,1}$ having a spreading factor of 2. Additionally, a code $C_{256,127}$ or $C_{256,255}$, which is located last in a direction of a down branch, i.e., a code having a spreading factor of 256, is selected as a channelization code $[C_c] C_c$ of the control part. The (n)th channelization code with a spreading factor SF can also be written $C_{ch \cdot SF, n}$

Referring to Figure 7b, a code $C_{256,0}$ or $C_{256,128}$, which is located last in a direction of an up branch from a node having a spreading factor of 2 is selected as a channelization code $[C_c] \underline{C_c}$ of the control part. Additionally, a lower node of two nodes having a spreading factor of 4 generated from a node having a spreading factor of 2 is selected and one of codes having spreading factors $4 \sim 256$ in a direction of an up branch $[CSF, SF/4, CSF, 3*SF/4]$ $\underline{C_{SF, SF/4}}, \underline{C_{SF, 3*SF/4}}$ of the selected node is selected as a channelization code C_d of the data part.

The following are mark-ups to show changes made to paragraph(s) starting at page 18, line 18 and ending at page 18, line 18:

$$\text{The number of scrambling codes} = \frac{32}{SF_{\min}} \quad \dots(1)$$

The following are mark-ups to show changes made to paragraph(s) starting at page 20, line 12 and ending at page 20, line 14:

Referring to Figure 9, each scrambling code used in an uplink in a wide band code division multiple access communication system is a long code and has $[2^{25-1}-1] \underline{2^{25}-1}$ chip codes. Each scrambling code thus has a chip length of $[2^{25-1}=33554431] \underline{2^{25}-1=33554431}$.

The following are mark-ups to show changes made to paragraph(s) starting at page 25, line 9 and ending at page 26, line 2:

Referring to Figures 11a and 11b, two methods are used for selecting the channelization code. As shown in Figure 11a, in the OVSF code tree, a channelization code C_d of the data part is selected from codes having spreading factors 4 ~ 256 in a direction of an up branch $C_{SF,0}$ or $C_{SF,SF/2}$ from a node $C_{2,0}$ or $C_{2,1}$ having a spreading factor of 2. A code $C_{256,127}$ or $C_{256,255}$ located last in a direction of a down branch, i.e., a code having a spreading factor of 256, is selected as a channelization code $[Cc] \underline{C}_c$ of the control part.

Referring to Figure 11b, a code $C_{256,0}$ or $C_{256,128}$ located last in a direction of an up branch from a node having a spreading factor of 2 is selected as a channelization code $[Cc] \underline{C}_c$ of the control part, while a lower node of two nodes having a spreading factor of 4 generated from a node having a spreading factor of 2 is selected and one $C_{SF,SF/4}$, $C_{SF,3*SF/4}$ of codes having spreading factors 4 ~ 256 in a direction of the up branch from the selected lower node is selected as a channelization code C_d of the data part.

The following are mark-ups to show changes made to paragraph(s) starting at page 26, line 15 and ending at page 26, line 15:

$$\text{The number of scrambling codes} = \frac{32}{SF_{\min}} \dots(2)$$

The following are mark-ups to show changes made to paragraph(s) starting at page 28, line 10 and ending at page 28, line 12:

Referring to Figure 13, each scrambling code used in an uplink of a wide band code division multiple access communication system has $[2^{25-1}-1]$ $2^{25}-1$ codes as long codes. Each scrambling code has a length corresponding to chips $[2^{25-1}=33554431]$ $2^{25}-1=33554431$.

The following are mark-ups to show changes made to paragraph(s) starting at page 43, line 10 and ending at page 43, line 14:

In transmission of the PCPCH, the mobile station uses a node $[C_{2,0}]$ $C_{2,0}$ having a spreading factor of 2 on the OVSF code tree against all of the CA-AICHs as a channelization code. In other words, the mobile station uses a node $C_{256,0}$ as a channelization code of the control part in the message part of the PCPCH and a node $[CSF, SF/4]$ $C_{SF, SF/4}$ variable depending on the spreading factor as a channelization code of the data part.